



**The SOUTH AUSTRALIAN SOCIETY of MODEL
and EXPERIMENTAL ENGINEERS INC.**

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**The Official Journal of
The South Australia Society of
Model & Experimental Engineers Inc.**

(Established 1927)



DECEMBER 2020

ISSN / 0155 / 3700

(This bulletin is issued for information only)

EDITORIAL.

This Bulletin's cover features one of the Club's eerie stations, complete with resident ghost, who only makes an appearance at Halloween.

Communication.

Yuletide Felicitations! We would like to wish everyone a happy and safe Festive Season.



2020 certainly has had some challenges. With the multiple uncertainties attending the ever changing Covid rules, it has taken a huge amount of work on the part of many members, firstly to get the club running, and then to keep it so. Thanks to all those members and a special thanks must go to President Bryan who has led the charge and put in countless hours grappling with the intricacies of the Covid restrictions. Here is looking with unbridled optimism to a fantastic 2021!

The Bulletin

Going through the Bulletins held in the library, the earliest one we have is September 1962. It is endorsed Volume 2, Number 2. This being the case, it appears the Bulletin was started in 1961 – so 2020 is its sixtieth year! There are, however, quite a few missing from the archives, assuming of course that there was always four published each year. At the back of this Bulletin is a list of the Bulletins we have in the library. If you have any that would fill the gaps (remember the box in the shed down behind the chook house) could you lend them so a copy can be taken?

Now that the majority of Bulletins are distributed electronically, is it appropriate to retain the A5 format for the electronic versions? There will still be a limited number of printed copies and these will retain the A5 format. Please let me know what you think.

Because of the Covid 19 restrictions and our not being able to meet regularly for several months it was decided to publish six Bulletins this year. Now that things have settled down a bit, and regular meets are back on the agenda, we will be reverting to four in 2021. (Phew!). The next Bulletin will be due in March, so a flood of articles would be greatly appreciated.

PRESIDENT'S REPORT.

Bryan Homann

SASMEE Bulletin – Presidents report Nov 2020

As this will be the last Bulletin for 2020, I take the opportunity to thank all our members for their support and forbearance during this year. It has been frustrating and difficult for all of us, but despite that, when the call has gone out to maintain the Park, and to re-open after the first Covid lock-down, many many members answered that call. With numbers in the 30-40 working to make field days a success, that is a remarkably high proportion of local members, and in some cases, partners.

It has been evident however, that there exists a risk of some members getting type cast into the same Covid and administration related jobs, thus inhibiting their opportunities to drive trains, or mess around with boats. Therefore, I would urge all members to consider being flexible in their preparedness to assist in some of the more mundane seeming jobs, even if only for part of the event.

The reality is, that without those mundane jobs being fulfilled, there will not be any opportunity for anyone to get to display and enjoy their models.

While I am drafting this report during the latest lock-down, we can only hope that we will be able to enjoy each other's company at the Christmas and Show of Work get together. If that has to be curtailed, then it is my view that rather than the event being cancelled, that it be postponed to a future time – maybe toward the end of Summer. Interesting chain of events in late November.

We decide ourselves to cancel the Saturday Field Day on account of an emerging Covid cluster. A couple of days later the State Govt locks us all down, also effectively cancelling the field day. And guess what, the current BOM forecast comes out at 37degree temperature, also closing the field day down. So, least they all came at the same time rather than on three separate occasions – so far!

Probably a totally unique occurrence for SASMEE.

I have also been thinking about the Show of Work. Generally, it showcases new projects, either under way, or just completed. However, by doing a day time Show, with more time, we could enhance it by also bringing along projects from the past that perhaps have not

seen the light of day for some time. This could be especially of interest to new members, who might then get to see some work from when many of us were still learning to become model engineers. That could assist in demonstrating that you don't have to come to the hobby as a master crafts person, but can learn as you go. It could also bring back memories of SASMEE days past.

Finally, (and this must be one of my shortest dialogues!!), on behalf of myself, and the rest of the Committee, I wish you all a happy Christmas, and a 2021 that is a great improvement on 2020. Stay safe, and keep on modelling.

Bryan

IN THE LIBRARY

Max Shuard

Book of the Month

Metal Finishing Techniques. Alex Weiss. Have you ever wondered how those stunningly mirror finishes are achieved on models you see on display? Well, this very question was exercising my mind when finishing the boiler dome for Tich. Not that the finish could be described stunning, but this book did give a lot of advice. It starts off with the basics, describing the various techniques available to achieve the desired finish. It then describes in detail the tools and techniques required, emphasising that not everything needs to be absolutely mirror like. So, if you have ever wondered what is the difference between lapping and honing, or even the appropriate finish for a painted surface, this book will help.



Magazines

The situation with the magazines is not as dire as reported in the last Bulletin. We are now up to date with both Model Engineer's Workshop

and Model Boats. However, Model Engineer is a real mess. The library is missing:

4609 April 1 – April 12

4636

4637

4638

4639

4641

We then have all copies through to 4649.

So, if you have bought any of these magazines in the last few months, please don't throw them out. We may need them.

Communication.

As well as books and magazines, stored in the library are:

- Quartering jig for 3½" and 5" wheel sets,
- 5" wagon bogie frames for sale at \$120 for a set of four side frames and two bolsters.
- Whistle boards if any are needed on the track,

Even though we cannot meet at the clubrooms, the library is open from 7:00 to 7:45 on General Meeting nights. Also, I generally attend the public run days and Wednesday working bees, so if you are looking for something, please just ask.

Just a thought: Twenty minutes after completing the first successful electric arc weld, the inventor went and invented the electric angle grinder!

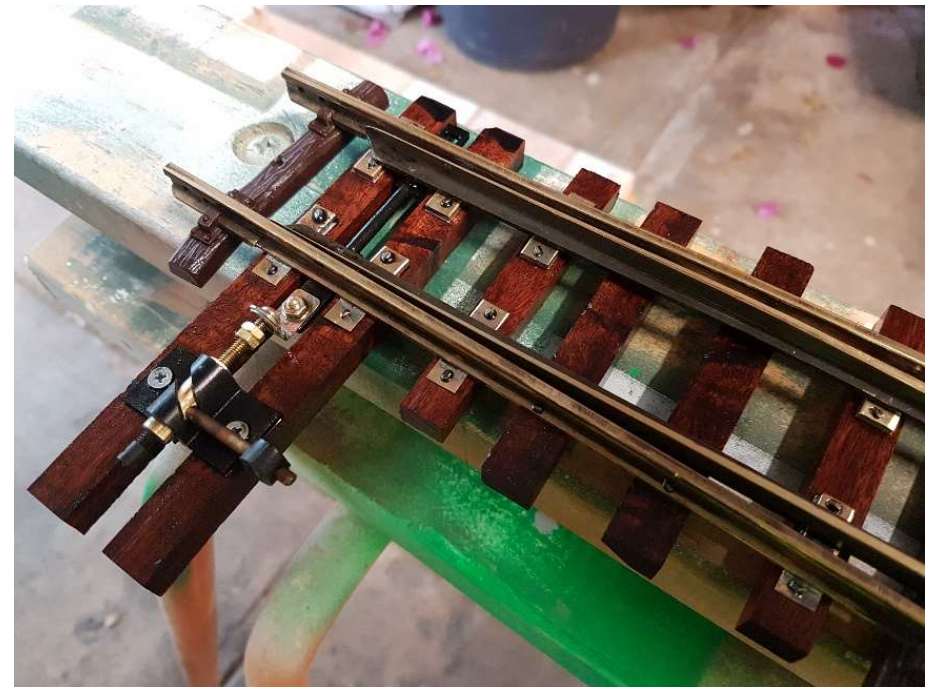
TECHNICAL MATTERS

Garden Railway Turnout Rebuilding – Alan Thomas

While the open days stopped at the start of the COVID pandemic, I took the opportunity to rebuild and repair all of the 45mm gauge turnouts on the garden railway.

Most were running OK, but derailments were becoming more regular, particularly when shunting.

The six Thiel brand turnouts had many sun damaged broken plastic sleepers and the milled brass V crossing within the frog was worn down. I cut new Jarrah sleepers from my supply of recycled timber and spiked them through pre-drilled holes within the foot of the rail. Some of the worn V crossings were fixed by making a new frog using brass rail soldered together. The others I ground out the V and soldered in a piece of nickel silver filed to shape. The finishing touches to the Thiel turnout rebuild were new guard rails made from brass rail and a new throw mechanism made from brass stock and fasteners.





The remaining turnouts were made by Llagas Creek Railways and were faring better in the elements. The main source of derailment from these was the distance between the switch and stock rail not being sufficient. This reduced gap would cause a passing wheel to ride up and the outcome was a derailment. Unfortunately, this issue is made worse as some commercially made wheels back to back measurement is under specification. Thankfully this is an easy fix on the Llagas turnouts once removed from the railway. The brass pins attaching the points to the throw bar were removed, re drilled to provide a larger gap to the stock rail. The ground throw had sufficient travel to gain an extra 1.5mm of distance, eliminating the issue even for a slightly under gauge wheel.



You may be asking, why not just fix the wheel back to back to be within specification? Unfortunately, on a particular brand of locomotives, the wheels are on a tapered axle making it impossible to increase the wheel back to back easily. Also, the switch and stock rail gap on the Llagas Creek Railways turnouts in my mind is too tight unless you're running all fine scale wheels and everything is perfectly level.

Now that the open days have returned and the railway being used again, the signs are promising. The well-deserved birthday for the turnouts has been worthwhile. I've enjoyed the project as I find working on trackwork therapeutic, particularly cutting sleepers and spiking rail much to my wife's amusement.

ENGINE 520's TENDER BY Barry Dunstan

In the April bulletin, I indicated we would be occasionally including articles on the 1:1 scale. Here is such an article. Thanks Barry. Ed.

For several years enthusiasts have been asking the question, "Will 520 ever run again?" We all know that the tender was suffering from long time corrosion which eventually resulted in the locomotive being withdrawn from traffic as long ago as 1998. Nothing less than a

completely new tender would enable the loco to ever run again. Megabucks for outsourcing the works was not within SteamRanger's reach.

For many years many ideas come and went in the meantime the loco stood in the back shops gathering dust. The late Dean Harvey (aka the father of SteamRanger) always considered engine No.520 as his "Racehorse" and kicked off the idea of a new tender rebuild by offering a substantial donation and an undertaking by Huntington Engineering, of Mount Compass, to work within this offer. This was acceptable to SteamRanger who took the opportunity to redesign configuration to suit their requirements given that structural integrity was not compromised. The old tender allowed for water within the mainframe thus allowing greater capacity. This was the Achilles heel! With the new tender the main frame is dry and covered by a substantial floor. Internal baffles are reconstrued and the main body is of greater thickness. The new tender has an indefinite life. Railway rolling stock engineer, Dr. Alan Wallace, supervised and passed all of these alterations. Huntington Engineering purchased all of the steelwork and commenced the rebuild.

Firstly, the old tender was cut from the mainframe and scrapped except the top coaming and cab attachment which would be attached back to the new tender. The mainframe was cleaned and treated. Over a period of five and a half years the new tender was meticulously constructed until finally on 17/6/20 it was ready for transfer by low loader to SteamRanger's Depot at Mount Barker where two cranes awaited to lift the tender back on to its bogies. At Mt. Compass the tender had been lifted by jacks onto four pig stys arranged so that the low loader could back in underneath. The loading at Mt. Compass and transport to Mt. Barker was all prearranged by the Mechanical Services Manager and all went without any hitches. Of interest is the low loader, a 1990 model Mack, which owner/driver Greg claims it's only done four million KM, on its third engine, second transmission and is still a pleasure to drive after having owned it for twenty-five years.

The accompanying photos show the tender at and leaving Huntington Engineering and completed on to its bogies. As this major hurdle has been overcome and other Depot projects are nearing completion it is anticipated that more attention can be directed toward the locomotive.

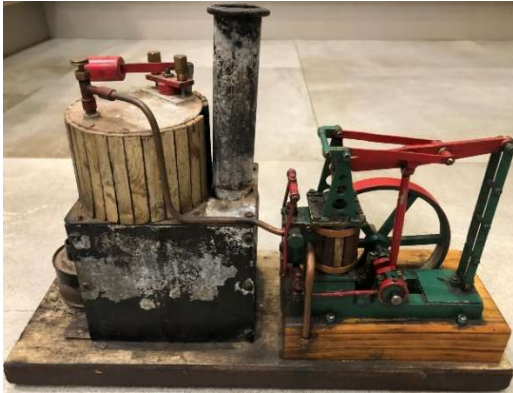


IN THE WORKSHOP

No articles here. There must have been a lot achieved during the recent lockdown. Be assured I'll be chasing up some action in this area.

Help Wanted

Craig Potter of Glandore has asked for help in restoring this engine made by close friend. He is happy to do a lot of the work himself but needs support and advice when it comes to rebuilding the engine and some of the boiler work, particularly the plumbing. The engine has been run but now does not run smoothly.



The scope of work required would be:

- Pull down the engine. Examine, clean and paint components and reassemble. Craig can do the cleaning and painting of the engine components under instruction.
- Fashion and plumb a new boiler. A lot of help needed here.
- Make a new, or restore the existing boiler housing chimney. Craig is capable of this, but the structure will depend on suggestions/dimensions for the new boiler.
- Make a new mounting base for both the boiler and the engine. Craig can do this, but considering the boiler work and the dismantling/reassembling of the engine, it need not be the same dimensions or configuration.

It is the pulling down and rebuilding of the engine and the making and plumbing of the boiler that I need the help with.

Max

SASMEE BUSINESS

A Club Project Complete.

John Foster

About 12 months ago, or more, the saw arm of the power hacksaw in the workshop failed. Metal fatigue was the prime cause. The arm had cracked about halfway through and then failed in use.

Jeff During undertook review the overall condition of the machine. His review revealed that all the bearing bushes were badly worn (remember the knocking whenever the saw was used), and the gear teeth on the cast iron main gear were damaged.

Jeff has reinforced the saw arm, replaced all the bushes with bearing and cleaned up the drive shafts.

Finding replacement gears was considered unlikely due to the age of the saw. Other drives such as belt and chains were considered and discounted as unsuitable due to space limitations. Manufacture of new gears was considered the best solution.

Ian Thomas volunteered to make blanks for the pinion and main gear. Simon Huntington offered to cut the gear teeth.

Jeff During added the necessary holes for the roll pin drives and reassembled the saw. It was successfully tested on Wednesday 11th November 2020. As they say on Sesame Street an example of COOPERATION. **Many thanks to those involved.**

Please remember the saw is an old lady and is designed to operate at its own speed and forcing it will lead to failure. The handle on the front is for lifting the arm, not for forcing the blade down.



Up and Running

The information for this section of the Bulletin comes from the sheets filled in on the run days. Please fill these in correctly. Even not dating them means they cannot be used. Before the most recent closure, there were Public Run Days on the for Halloween on 31st October and a regular run on 1st November. But unfortunately, no information.

Fortunately, plenty of photographs to record the Halloween Runs.



A General Meeting was held at the Bowling Club on the 10th of November. We dodged a bullet there as four days later the state entered into a lockdown!

Annual Show and Tell

The December General Meeting has been cancelled but we can still hold the Christmas club run day.

We will hold the annual Show and Tell at the Christmas club run day. Nominally between 2:00 and 4:00 in the afternoon. This run day is scheduled for Saturday 19th December. The Show and Tell is always a highlight of the year, so bring along all your work, no matter at what stage it is, to share with other members.

Please remember to place a card with your name and a brief description of your model near your model. It makes recording so much easier!

Halloween Run Review.

During the evening Public Halloween Run there were significant delays for the public awaiting to get train rides. A small group from the club was formed to review the operations that evening. Below are the conclusions and recommendations from that review.

Conclusions.

1. The evening run, where visitors were focussed on Halloween, had no other activities other than riding on the trains. This contrasted with regular run days and the afternoon run where alternative activities are available. The result (in the evening) was that almost all visitors were looking to ride trains at the same time. If it is assumed that three hundred and fifty passengers (of a possible four hundred) were looking for a ride, two hundred on the 7 1/4" gauge and one hundred and fifty on the 5" gauge, the queues would have been excessively long, even under ideal operating conditions.

2. During the evening a number of locomotive failures occurred on the 5" gauge. The 71/4" operation was possibly suboptimal due to drivers being unsure of the current operating rules concerning train lengths. Both these issues served to worsen the wait times.
3. The wiping down of seats and handrails did not materially affect the train cycle time. The justification for continuing this practice is included in Appendix 1.
4. There was a general shortage of members, possibly due to the short notice or there being three runs on the one weekend.
5. Aside from the issue of trip wait time and length of queues, the evening run was considered successful and should be retained.

Recommendations

1. A greater understanding of the operating logistics is required for undertaking extra run activities. It is recommended that for future events, a Co-ordinator or co-ordinating committee be appointed to examine and co-ordinate all activities, including, but not limited to:
 - Available trains. Locomotives, Wagons, drivers and guards
 - Available station staff, including extras while the Covid 19 restrictions are in place.
 - Available canteen and ticket booth staff.
 - Available members to co-ordinate, run extra activities, decorations etc.
2. It is recommended that for theme run days such as Halloween, either extra activities are provided, or the number of visitors is limited to the expected trip capacity, allowing for a maximum wait time of thirty minutes.
3. It is recommended that future special events be planned well in advance. It is acknowledged that the circumstances this year due to the Covid Pandemic made this difficult.

4. It is recommended the training of station staff be re-energised to help members become more comfortable with managing crowds.
5. It is recommended that the issue of allowable train lengths be clarified.

A full copy of the report is available on request.

Actions following from the Halloween Review.

Train loading.

Confusion on the allowable loading of trains to comply with the Covid rules was raised as an issue. Dylan O'Sullivan and Max Shuard are looking at the current restrictions with a view to simplifying the requirements where possible. Unfortunately, due to the cancellation of the December General Meeting, presentation of the findings will not be available until the New Year.

Event Co-ordinator.

For special events, it is apparent that the event needs to have a much higher level of planning than normal run days. To this end, it is intended to call for one or more volunteers to manage the event.

The first and most urgent requirement is for a Co-ordinator to manage the run day prior to the AALS convention. This will be on Thursday 1st April 2021. While this seems a way off, it would be great if a co-ordinator would step forward before Christmas, as there are early tasks to do by way of inviting and informing other clubs of SASMEE operations.

Halloween 2021 will also be an event that will require a co-ordinator.

Saturday Mornings

Max Shuard

Now that summer is here, I'm generally a SASMEE from 0900 to about 1100 on Saturdays. Watering the lawns and general tidy up. If anyone

wishes to join, please let me know in advance, either by email or 'phone to make sure I'll be there. Would be nice to have some company and there is always much to do.

Missing Bogie Patterns

Some years ago, John Lewis made some patterns for casting 5" gauge riding car bogies. These were stored in Fort Knox. Attached are photographs of the patterns. These patterns are now missing from the club. If you know where they are or have them, please advise the club.



Reminders!!

Subs.

There are a number of members who still haven't paid their annual member subscriptions. These were due last August. Please forward payment urgently or your membership may lapse.

Smoke

Drivers are advised and asked to keep smoke emissions to an absolute minimum. If you are having trouble controlling smoke emissions, John

Mere, Brenton Dicker and Allan Wallace are available to offer advice and help. Please take up the opportunity. We don't not want any formal complaints that may curtail our activities.

Covid Hygiene Training Online

A reminder, please complete the Covid Training and Covid Marshal Training. Without enough trained volunteers, we cannot continue to run.

Working with Children

And for those who still haven't undertaken their "Working with Children" clearances, these are still necessary, so please get on the case.

SASMEE Bulletins held in the Library

1960		1970	Mar/May	1980	Mar/Jun	1990	March	2000	April	2010	March
		Vol 10	Jun/Aug	Vol 20	Jun/Aug	Vol 30	June	Vol 40	July	Vol 50	May
			Sept/Nov		Sept/Nov				October		September
			Dec/Feb		Dec/Mar		November				December
1961		1971	Mar/May	1981	Apr/Jun	1991	March	2001	February	2011	March
Vol 1		Vol 11	Jun/Aug	Vol 21	Jun/Aug	Vol 31	July	Vol 41	June	Vol 51	June
			Sept/Nov		Oct/Dec				October		September
			Dec/Feb		Dec/Feb		November		December		December
1962		1972	Mar/May	1982	Mar/May	1992	February	2002	March	2012	March
Vol 2		Vol 12	Jun/Aug	Vol 22	Jun/Aug	Vol 32	May	Vol 42	June	Vol 52	June
No 2	Sep/Nov		Sept/Nov		Sept/Nov				September		November
	Dec/Feb		Dec/Feb		Dec/Feb		December		December		
1963	Mar/May	1973	Mar/May	1983		1993		2003	March	2013	February
Vol 3	Jun/Aug	Vol 13		Vol 23	Mar/Jun	Vol 33	April	Vol 43	June	Vol 53	May
	Sep/Nov		Sept/Nov		October				September		August
	Dec/Feb		Dec/Feb		Summer		November		December		December
1964	Mar/May	1974	Mar/May	1984	Autumn	1994		2004	March	2014	March
Vol 4	June/Aug	Vol 14	Jun/Aug	Vol 24	Winter	Vol 34		Vol 44	June	Vol 54	July
	Sept/Nov		Sept/Nov		Spring				September		September
	Dec/Feb		Dec/Feb		Summer		November		December		December
1965		1975	Mar/May	1985	Autumn	1995	April	2005	March	2015	March
Vol 5	Jun/Aug	Vol 15	Jun/Aug	Vol 25	Winter	Vol 35		Vol 45	June	Vol 56	July
	Sept/Nov		Sept/Nov		Spring		September		September		October
	Dec/Feb		Dec/Feb		Summer		December		December		December
1966	Mar/May	1976	Mar/May	1986		1996	March	2006	March	2016	February
Vol 6	Jun/Aug	Vol 16	Jun/Aug	Vol 26	Winter	Vol 36	June	Vol 46	June	Vol 57	July
	Sep/Nov		Sept/Nov		Spring		September		September		Oct
	Dec/Feb		Dec/Feb		Summer		December		December		
1967	Mar/May	1977	Mar/May	1987	March	1997	March	2007		2017	February
Vol 7	Jun/Aug	Vol 17	Jun/Aug	Vol 27	August	Vol 37	July	Vol 47	June	Vol 58	June
	Sep/Nov		Sept/Nov		October		September				November
	Dec/Feb		Dec/Feb		December				December		
1968	Mar/May	1978	Feb/May	1988	March	1998	March	2008	March	2018	February
Vol 8	June/Aug	Vol 18	Jun/Aug	Vol 28	June	Vol 38	May	Vol 48	June	Vol 58	
	Sep/Nov		Sept/Nov		September		July		September		June
	Dec/Feb		Dec/Feb		December				December		
1969	Mar/May	1979	Mar/May	1989	March	1999	February	2009		2019	March
Vol 9	June/Aug	Vol 19	Jun/Aug	Vol 29	June	Vol 39	May	Vol 49	June	Vol 59	June
	Sep/Nov		Sept/Nov		September		September		October		Oct
	Dec/Feb		Dec/Feb		December		December		December		